

# Aviation News

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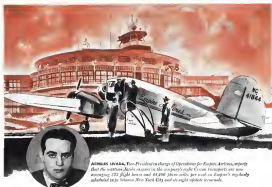
**Floats on Two-Control Plane:** Preliminary flight tests of the new Edo float installation on the latest 75 hp. Ercoupe, prior to CAA type certification, indicate satisfactory performance on water and in air with no impairment of non-spinnable characteristics. Details of the attachment of struts at the same points where the tricycle landing gear is attached are shown in the photo, as Robert Fogg, Edo sales manager, climbs aboard the plane at College Point, L. I. (Story on Page 15.)

## National Aviation Policy Formulation Slowed

Efforts to push action are bogged down in War Department .....Page 7

## Industry Scans AAF Development Center Plans

Endorsement of huge supersonic testing center likely to be held up.....Page 10



ARTHUR LYMAN, Vice-President in charge of Operations for Republic Airlines, reports that the wartime Jacobs engines in the company's eight Cessna transports are now averaging 222 flight hours and 24,000 plane miles per year on Republic's regularly scheduled trips between New York City and its eight upstate terminals.

## Wartime engines... on a peacetime job—

Republic Airlines began operations on December 26, 1945, at LaGuardia Field... and within three months was flying ten airports daily schedules which bring fast air service within convenient reach of thirty-two communities in the Empire State. These flights are maintained with newly converted AAF UC-78 Cessna transports powered by the wartime Jacobs R755-9 engines.

On peacetime Airways, the Jacobs is again demonstrating the performance that established unsurpassed records for institutions service and maintenance satisfaction among engines used by the Army Air Forces... in carrying peacetime payloads for scores of the new airways and charter services, for hundreds of new private owners. The stamina, dependability and low operating costs which have characterized the Jacobs in the past, are confirmed

once more in today's commercial operation.

And the Jacobs R-755A, a new and improved version of the wartime R755-9, has been benefited by quantity production experience, better metals, extensive research... With the same dry weight, 510 lbs.—the new model has a normal rating of 300 hp at 2200 rpm... uses only 25 gallons of fuel and 2 quarts of oil per hour, creating a 70% power... is the most efficient, non-supercharged radial engine in its power class available today... will fly more miles on greater loads at lower cost, with high security in every flight hour.

The R-755A is available for immediate delivery. Inquiries are invited. Jacobs Aircraft Engine Company, Division of Republic Industries, Inc.



• Pottstown, Pa.

Division of Republic Industries, Inc.

## THE AVIATION NEWS

# Washington Observer



**CAA REPAIR BASE**—The fight against CAA's plan to establish a repair base for its own aircraft is expected to reach a showdown this week as the House returns from Easter recess, with the Commerce Department's opposition one of the first orders of business. Although CAA won half a victory when the Appropriations Committee recommended funds for the Oklahoma City warehouse and repair base—its total for \$2,053,000 for three installations, was granted \$1,500,000—opponents of the venture still believe there is a chance to beat it during their debate.

**MITCHELL REPORT**—A report by the Mitchell aviation subcommittee of the Senate's War Relinquishing committee which will endorse a large-scale well-worked out aviation research program and give government plans for such a program a Congressional push, has been delayed but is slated for release in the near future.

**WEATHERMEN LEAVING**—Headquarters of the Air Force Weather Service in Washington are expressing increasing concern over the rapid demobilization of weather personnel. An emergency operation in the form of specially prepared plans is being initiated to alleviate which has been described as a critical condition and to meet the serious need for supplying adequate weather data. It is planned to institute all stations where the U. S. Weather Bureau has a unit in operation. A weather officer will be placed on liaison duty to insure service for AAF agencies. Other emergency

measures include disbanding AAF temporary weather units that are within local telephone range of a Weather Bureau station and placing a forecast on liaison duty with the Bureau.

**SURPLUS SALES**—With War Assets Administration passing vigorously on progress to dispose of surplus through normal trade channels by means of agency agreements, there is renewed interest on the part of WAA officials to consider the employment of an outside firm, skilled in liquidation, to administer the agreements. The Murray Cook Corp., which reportedly did an outstanding job of liquidation for Merchants Reserve Co. in Reconstruction Finance Corp. subsidiary, is more prominently mentioned for the WAA work.

**NAVY RESEARCH EXPANSION**—Naval Research Laboratory, which does basic research in 18 fields of science, is establishing a new center at San Diego, Calif., to conduct research in airborne communication and electronic equipment, as well as guided missiles. It is fully known that NRL has a prominent role in the V-2 rocket test being made under the direction of the Army at White Sands, N. M.

**ALL-AMERICAN FLAG LINE**—New series of hearings on Senator McCarran's revised "All American Flag Line" bill will start around May 20. Two series already have been held over the past three years.



Republic's XP-44 Thunderbolt, now undergoing tests at Miami.





office of the Undersecretary of War who is charged with all procurement for the Army. Also in the works is a bill renewing general procurement legislation. AAF officials in charge of the civilian purchasing legislation have now been asked informally, and expect shortly to get a formal request, to justify the submission of a separate bill.

■ **Might Impair Plans**—Should the "justification" be too long in coming, or if it should not be acceptable to the Undersecretary, it would suggest the AAF's plan is to be before Congress at least a proposal for a national air policy.

## Shortages Cause Lay-offs at Boeing

Boeing Aircraft has been forced temporarily to lay off a portion of its factory working force because of delays in receipt of militarily-needed materials due to recent strikes in the West.

William M. Allen, president, said first lay-offs affected approximately 275 factory workers or about 2 percent of Boeing's total Seattle payroll. He said that as present work in the factory rises and materials fail to arrive from suppliers additional temporary lay-offs probably will be necessary.

■ **Aluminum Is Critical**—Most military delays are the aluminum alloy sheet a new alloy produced only by the Aluminum Co. of America. It is Oliver West Boeing executive vice-president, said it also has been reduced by suppliers that there will be serious delays in delivery of certain steel items and that the effect of the strike in the electrical manufacturing field on electrical equipment items still is not wholly known.

Most of the items on which the situation is now critical were ordered by Boeing early last fall even before alloy contracts for the commercial aircraft industry had been signed. Many of the needed items were scheduled for shipment from the mills in December.

## VA Report Shows Ex-GI's Favor Ground Courses

Veterans desiring aviation training are choosing the branches of aviation that hold greatest hope of employment, according to Veterans Administration figures which show that 36 percent of veterans enrolling in February are taking



### RAMSEY DEBACATED:

Admiral Donald C. Ramsey is quoted in the *Disappointed Service Medal* by Secretary of the Navy James Forrestal, for exceptionally meritorious service in a position of great responsibility as Chief of the Bureau of Aeronautics from August, 1918, to June, 1943. Admiral Ramsey now is Vice Chief of Naval Operations.

crossed courses. This is regarded as an encouraging sign by many school operators who have been fearful that an undue emphasis might be put on flight training with consequent unfavorable repercussions later when jobs for pilots might not be available.

The VA figures, covering the first full month of operation of the aviation training program, reveal total enrollment of 865 for aeronautics courses. Enrollment for all forms of education and training in February reached 53,545. Aviation enrollment constituted only one percent.

■ **Report Analyzed**—Breakdown of the aviation enrollment is airplane mechanics, 310 in schools and 159 on-the-job; total 471; commercial flying training, 50 in schools, 32 on-the-job; total 82; private flying training, 34 in schools, two on-the-job; total 36; aviation management, 47 in schools, three on-the-job; total 50; other aeronautical training, 32 in schools, 18 on-the-job; total 50.

### Oil Firm Buying 6 Planes

A fleet of seven new executive and salesman's aircraft is being purchased by Standard Oil Co. of Indiana, including a Lockheed L-12 Super, a six-place Beech, a four-place Cessna and a four-place Cessna, and four smaller craft. The smaller models will be used by company's expanded aviation sales department under L. A. Henry to contact field office, aviation representatives, airports and major customers.

## Post Office Interest Welcomed By CAB

Sullivan has said in which the postman hopes to intervene, based on expense claims.

By MERLIN MICKEL

Latest evidence of the earnestness with which the Post Office Department intends to keep its promise of "clearer relationships" with CAB as rules proceedings come in a letter to the Board demanding cases in which it desires to participate.

Written by Gust Sullivan, Second Assistant Postmaster General, to CAB Chairman L. Welch Pigeon, the communication brought out a response that the Board highly welcomes such strictly but assistance from James M. Landis, who has been contacted to succeed Pigeon in June, that the welcome will continue.

■ **Urged To Follow Through**—Sullivan already has been urged by Postmaster General Hargrove to follow through on last March 18 report, in which he stated the Department's intention to engage actively in the Board's code proceedings through its agency as housing and submission of Department views on radio air mail.

Writing as Acting Postmaster General, Sullivan informed Pigeon that, in addition to cases involving helicopter applications, the Department hopes to take an active part in the Texas-Oklahoma, Minnesota-Wisconsin, Great Lakes Area, Southwestern States and Middle Atlantic Area cases, and the North Central States case if practicable.

■ **Action Near**—All the latter are recent cases on which executive reports have been issued or are be-

ing needed. The Department will consider requesting leave to intervene and file and present in and submit its views on the value to the Postal Service of the proposed service.

Since the West Coast and New England cases await final decision by the Board, the Department will rather than delay these decisions which it needs with interest, it will take no action at this time.

■ **Helicopter Feasibility Checked**—Sullivan made a personal trip to Los Angeles this month to study feasibility of helicopter operations there. The Department was represented at a recent preliminary conference on helicopter applications for property and mail authorization at that time, and has letter promised that its participation in the case will continue.

Among active cases where Post Office is interested, he listed Boston, Chicago, San Francisco, Kansas City, New York, Philadelphia and St. Louis and the surrounding areas. Sullivan's other reports him to visit some of those later.

■ **Interested In New Routes**—Aside from helicopter services and the additional mail authorizations involved in the area cases, the Department availed interest in new route proceedings and offered "every cooperative assistance possible to the Board in the encouragement and development of an air transportation system properly adapted to the present and future needs of the Postal Service."

Four teams of 16 men have been sent into the field by Sullivan to study the aspects of several new aircraft equipment and the use, construction of new airports, coordination of proposed route patterns, development of new resources in rate structures and expansion of foreign agreements for international movements of U. S. mail.

## New CAA Appointments

Harry G. Tarrington has been appointed chief of the CAA's Division of International Activities, succeeding Alton Bird who has been named to the new position of director of the plans and performance staff. Tarrington has been liaison officer of International activities. He will be succeeded by Col. John P. Marshall, recently of the CAA office of military relations. Tarrington served as U. S. Technical Expert at the Chicago Conference and was largely responsible for agreement on aircraft registration and identification marks.

## Commerce Committee Resolution Challenged By Sen. Barkley

Majority Leader questions group's jurisdiction over international air agreements, stresses fact that move is not to be regarded as full Senate action; sets administration policy unchanged.

The Senate Commerce Committee yesterday declared the Reynolds and French executive aviation agreements illegal was challenged last week by Senate Minority Leader Alben Barkley (D., Ky.).

The resolution, adopted by the committee by a 14-1 vote, was filed with the Senate, together with a detailed report by acting committee chairman, Sen. John Overton (D., La.). Barkley, absent from the Senate floor when Overton obtained permission to submit the resolution and report to the Senate, challenged the action on his return.

■ **Assault Jurisdiction**—"The Committee on Commerce does not have jurisdiction over the matter," Barkley stated, maintaining that international aviation should come within the purview of the Senate Foreign Relations Committee.

His challenge brought backfire from Senate Commerce committee members, stepping off with a justification of their action and leading on into lengthy criticism of Administration policies on international aviation, including the TWA-Illinois air agreement.

■ **Defiant Action**—Overton and Sen. Owen Brewster (R., Me.) exceeded the jurisdiction of Senate Foreign Relations Committee over treaties of all types, including air treaties, but maintained the Commerce Committee was within its rights and acting in accordance with its responsibilities in pointing to violations of the 1926 CAA Act, which it drew up.

The CAA Act stipulated public hearing prior to the granting of any certificate for operations to or within the U. S. to a foreign flag line, and the President is without power to over-ride Congressional law through executive agreement, Brewster and Overton said. They argued that the treaty is the only constitutional vehicle for ratifying existing law.

■ **Administration Reported**—Barkley, however, claimed that the executive branch of the government was "on sound ground" in its position against the right to negotiate bilateral air agreements. The Majority Leader's challenge to the resolution and report came too late to block their submission.



### CAA'S OFFICIAL FAMILY

First post-war group photo of T. P. Wright, Administrator of Civil Aeronautics and his staff, including newly-appointed regional administrators. Standing, from left: Joseph S. Morrow, Regional Administrator, North Region; Howard Rapp, consultant, Walter P. Platt, Eighth Region; C. D. Rodgers, Seventh Region; Orr W. Young, First Region; William E. Kline, Assistant Administrator for Federal Aeronautics; A. S. Knox, Assistant Administrator for Foreign Operations; L. C. Elliott, Fourth Region; and John F. Werlich, Regional Counselor. Seated, from left: John M. Beardsley, Regional Administrator, North Region; Leonard W. Jordan, Fifth Region; George W. Ford, Third Region; William M. Robertson, Second Region; and Mr. Wright. Morrow, Rapp, Rodgers, Young, Kline, Werlich, Jordan and Ford recently returned from military service.



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## PRIVATE FLYING

### Three-Place Pusher Amphibian Being Tested By N. Y. Designer

Spacely and plywood Banzard Sportplane has horizontal stabilizer mounted on top of fuselage. 120-hp. Franklin engine gives it 205-mph. cruising speed and 450-mile range.

A three-place amphibian of spruce and plywood construction, the Banzard Model BA-33 Sportplane, now being test-flown in the vicinity of Long Island City, N. Y., is another interesting "dark horse" entry in the personal plane market competition.

Kenneth L. Banzard, of Long Island City, the designer, expects the Sportplane to complete its CAA tests this fall and will delay announcement of production plans and price until that time.

**Designed For Navy.**—The plane originally was designed as an amphibious aircraft for the Navy, but the interest shown by private flyers in other amphibians has caused revision of his plans for production.

Most unusual feature of the design is the empennage. The horizontal stabilizer and elevator are set at the top of the vertical fin, slightly below the thrust line of the pusher engine installation. The arrangement is used to supply the plane with unusually good longitudinal stability. **Large Engine To Be Used.**—The prototype is modified with a cruising speed of 185 mph, and a range of 450 miles at this speed. Its 120-hp. air-cooled Franklin engine is expected to be replaced by a 150-hp. engine in the production version, which should increase the speed somewhat. Banzard also is contemplating production of a four-place amphibian of similar design, with a 340-mile range cruising at 115 mph. Max difference in the four-place design will be a larger fuselage.

The Model BA-33 cabin will carry three persons and 56 lb. of baggage. Entrance is gained through either side of a hinged gullwing canopy. A patented dual control system, used to require a measure of maintenance and provide ample room for all three occupants.

**Hull Is Conventional.**—The hull is of conventional design with spruce

intermediate frames and built-up spruce plywood bulkheads. An outer keel on the forward section of the hull is of oak sheathed in stainless steel to bear stress of water landings.

Upper there is of box type construction running from canted bulkhead to aft of the rear spar head, and then aft to rudder post as

a solid spruce section. Lower chassis and keel are also spruce. Except for the forward deck, the fuselage skin is of flat plywood sheets, skinning expensive pre-forming. The dotted full-canviler wing is described as exceptionally strong and with high torsional rigidity, due to its wide main spar, an auxiliary spar supporting ailerons and flaps, and this is in mahogany plywood skin.

**Finless Gear Used.**—A steel tube tripod shock absorber behind the cabin supports the engine and the 24-in. fuel tank. The engine is fixed with a two-position Semetech propeller, both tapered and engine are easily turned and moved.

**Super-flex bicycle landing gear is used.** Front wheel retracts vertically into a reservoir, while main wheels turn to rear and upward to become partially housed in the wings.

**Finless Landing.**—Banzard notes the following "easy maintenance" features:

- Easy skin repair in field due to flat plywood components.
- Removal of cowling makes engine entirely accessible.
- Fuel tanks and fittings are accessible for inspection and repair by removing side cowling on tripod.
- Main landing gear legs are detached from hull by removing two bolts, and nosewheel assembly may be removed by lifting deck cover and removing two bolts.
- Easy inspection of controls, and rear hull section.
- Use of stainless steel in fittings exposed to water spray.
- Self-aligning ball bearings on all

#### Specifications

Specifications and tentative flight performance data for the new experimental Banzard Sportplane amphibian include:

Wingspan	34 ft. 4 in.
Length	31 ft. 6 in.
Height	10 ft. 6 in.
Gross weight	2,350 lb.
Proposed 120-hp. Franklin	
Cruising speed	205 mph.
Landing speed	55 mph.
Take-off speed	40 mph.
White Island test	175 lb.
Load (cabin)	500 lb.
Rate of climb	900 ft./min.



**New Amphibian.** The three-place experimental Banzard Sportplane amphibian originally was designed as an emergency landing amphibian for possible Navy use. With a 120-hp. Franklin engine, the plane is credited with 205-mph. cruising speed. Its unique tail design gives it unusually good longitudinal stability, the designer reports.



**Designer and Pilot:** Kenneth L. Bergard, Long Island City, designer of the Bergard M-32 Sportster, below, opens the glider's baggage canopy on his three-place amphibian, a kitby air entry in the personal plane field. The Sportster has retractable tricycle landing gear, truss plywood hull, and easily started engine mount.

central surface hinges and control rods.  
► Treatment of all wood and metal components with plastic treated bonding materials.  
► Designing Since 1931—The designer traces his flying and design experience back to 1931 when he built his first airplane at Westchester, N. Y. Known as the society's smallest flying boat, it was a biplane of 11-60 inch, powered by a 15-hp Johnson outboard motor, and carrying license NX-63304. The plane flew successfully but was never built in quantity. A second Bergard design, which never went beyond workshop, was an amphibian with a monocoque fuselage design which settled in a King boat hull and could be removed to convert the plane into a landplane.

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#### Committee to Meet

Reaffirmation of radio licensing for the private pilot, aviation instruction for advanced GAs, improvement of service at airports for pilots and air navigation problems were on the agenda of the CAA's "Flying Advisory Committee" which met in Washington last week. Committee members were guests at a demonstration of the new Berling's Flightweight series at Washington National Airport.

#### New Idaho Aero Head Sets 5-Point Program

Chet Moulton, new Director of the Idaho Bureau of Aeronautics, has announced the following five-point program for Idaho aviation and is asking the support of Idaho aviation enthusiasts for an organization.  
► Emphasis on safety and assistance to individuals and communities to



aviation subjects, with special emphasis on Classes I, II and III flights, avoiding selfish grasping for large airport funds that may later rebound on the small community's ability to maintain.

An advisory program.  
► An aviation education program through state and local school systems as well as colleges.  
► An executive and ground safety program coordinated with state search and rescue organization.

#### Two Licenses Revoked For CAR Violations

The Civil Aeronautics Board revoked the airmen certificates of two pilots recently and suspended those of eight others following investigations of Civil Air Regulation violations.

Summary of the cases and Board penalties follow.

##### REVOCATIONS

One of Captain's pilot was suspended for 30 days for violating CAR section 61.101, 61.102, 61.103, 61.104, 61.105, 61.106, 61.107, 61.108, 61.109, 61.110, 61.111, 61.112, 61.113, 61.114, 61.115, 61.116, 61.117, 61.118, 61.119, 61.120, 61.121, 61.122, 61.123, 61.124, 61.125, 61.126, 61.127, 61.128, 61.129, 61.130, 61.131, 61.132, 61.133, 61.134, 61.135, 61.136, 61.137, 61.138, 61.139, 61.140, 61.141, 61.142, 61.143, 61.144, 61.145, 61.146, 61.147, 61.148, 61.149, 61.150, 61.151, 61.152, 61.153, 61.154, 61.155, 61.156, 61.157, 61.158, 61.159, 61.160, 61.161, 61.162, 61.163, 61.164, 61.165, 61.166, 61.167, 61.168, 61.169, 61.170, 61.171, 61.172, 61.173, 61.174, 61.175, 61.176, 61.177, 61.178, 61.179, 61.180, 61.181, 61.182, 61.183, 61.184, 61.185, 61.186, 61.187, 61.188, 61.189, 61.190, 61.191, 61.192, 61.193, 61.194, 61.195, 61.196, 61.197, 61.198, 61.199, 61.200, 61.201, 61.202, 61.203, 61.204, 61.205, 61.206, 61.207, 61.208, 61.209, 61.210, 61.211, 61.212, 61.213, 61.214, 61.215, 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## CARLOAD OF PIPERS

Taking advantage of the new CAA policy of permitting flight test of production aircraft after delivery of the planes in disassembled state, packed in freight cars, Piper Aircraft Corp., Lock Haven, Pa., recently shipped a new outstanding air Cub 35 planes, packed as shown above, to Minnesota State Airlines, Duluth, Minn. Under the previous system, planes were assembled at the plant, test flown, and then disassembled for better shipment. The new policy results in a savings of about \$10 to the manufacturer on the delivery price of each airplane.

nonwheel assembly. Duralumin struts which provide drive for cockpit screen, and wire bracing, complete the front landing gear.

**Steering Controlled.**—The control wheel operates the water rudder through the steering mechanism for the nonwheel. Standard control cables from the rudder are attached to a bell crank lever of the first wheel. The crank is connected by the nonwheel steering pedestal.

While most lightplane float installations provide for extension of the water rudder at high speeds, the Escape water rudder is kept in the water providing positive

## New Edo Branch

Edo Seaplane Service, Inc., College Point, N. Y., recently received a charter from the New York secretary of state, to provide mail service in flying activities. Branches are Earl D. Osborn, president of Edo Aircraft Corp., and George B. Post and R. D. Voller, vice-presidents at Edo. It is understood that the new corporation was formed to handle flight and flight activities for the state manufacturer.

## Briefing For Private Flying

The Halliburton Skyhawk soon will be standard equipment on the 100-hp Piper Super Cruiser. Halliburton, which principally made amateur radio equipment before the war, is producing an aircraft transmitter which weighs less than 10 lbs. complete with power supply and other accessories and which eliminates the requirement for special handling and shielding of antenna systems in most planes. The Piper deal is the second by contract for Halliburton, following close after assignment of a contract to supply the Skyhawk in standard equipment on the He-bubler Sedan (Aviation News April 15).

**BRITISH SERVICE.**—American charter flight operators will soon study the possibilities of a new plan of the London Area & Meier Services which has announced a combination rate for airplane and service. The charter service, which is a British one, is the company's home or office, which also is the airport. The plan is to use an airport near the destination, and has no end to the working. Rates are on a mileage basis, including down from a 100-mile maximum flight at approximately 25 cents a mile to a rate of 25 cents a mile for flights of over 100 miles. Charter rates for the flight include both ways whether the user is at or not on the return trip, and pays waiting time of 50 or more in distance and 100 or more at night if the plane remains for a return trip. This includes all pilot's and plane's expenses.

**PERSONAL HELICOPTERS.**—A light lift is the new commercially-licensed Sikorsky four-place S-51 helicopter at Washington National Airport last week after being for an examination that the helicopter is much further along its way toward mass production than the conventional four-wheeling airplanes would have you believe. From a standpoint of passenger comfort the S-51 has an edge over most four-place airplanes. The instrument panel and control grouping on the S-51 is one of the most compact jobs seen on any aircraft. The cabin is well soundproofed, visibility is excellent. The aircraft is painted in a maroon and gray color combination which makes it look much more like an ordinary commercial aircraft. The pilot worked harder at the controls than an airplane pilot has to do, but of course he accomplished difficult maneuvers such as vertical takeoff, hovering, flying sideways, flying backwards and vertical descent, which the ordinary airplane cannot do. And the price is high for a four-place aircraft (about \$45,000). Give the helicopter a manufacturer's couple of years to perfect the controls and get production costs down some and you will see competition in the personal aircraft field.

—Alexander McHenry

control at all speeds while the floats are in the water.

**Emergency Prevalent.**—A clutch mechanism is incorporated in the bell crank, to regulate springs, not really used in water rudder systems to prevent jamming of air controls by landing or floating of water rudder or cabin. A pin in the clutch may be withdrawn, by pulling out the parking brake lever on the outer front, thus disconnecting the water rudder from the air controls at this should be necessary.

While the first version of the Escape has yet to complete its CAA certification tests, preliminary flight tests indicate its attitude on floats is about the same as on wheels, and that water takeoff and landing technique is quite similar to

that used on land. Carl Set at 1934.—The Rolo that installation on the Escape is quoted at \$995, although the installation will be available until the CAA certification process is completed. The Rolo company reports it has already received a large number of orders for floats to be installed on the planes.

## New Airport to Open In Greater Boston Area

The Revere, Mass., Airport will be open for operations early in May to provide another potential plane for flying in the Greater Boston area. The field will have three runways, 2,800, 2,000 and 1,800 ft. long.

## SPECIAL AIR SERVICES

CHARTER

NON-SCHEDULED

INTRASTATE

## 6,000,000 Miles

## Flown By Trans Air

1,686 passengers carried in four days of April, New York-London flight under study.

Trans Air, Inc., first non-scheduled carrier to operate DC-4's, has run on a total of 6,000,000 plane miles since beginning operations Feb. 1 and in planning non-scheduled operation between New York and London. During the first eight days of April a total of 1,686 passengers were carried.

Each of the package to date has been run up by Trans Air's two DC-4's, added only in March by two DC-4's. A third is scheduled to arrive in about a week and the fourth is expected by about the end of the month. All are new with dual fuel pump valves and certified by CAA for 50,000 lb. gross weight at takeoff and 11,000 lb. for landing.

**Area Served.**—Domestically, with a short intermediate "leg," Trans Air is operating a New York-Miami-Memphis - Miami - Chicago - Detroit - New York route. Intermediate stops are made. Passage is sold from New York, Miami, and occasionally Chicago, to New York with Miami enroute.

Domestic, too, air tourist and sight agency, handles all ticket sales at New York, Miami and Chicago. No passengers are sold between Miami and Miami to avoid conflict with a local carrier.

**New Charters.**—The New York-Miami business is declining, but Carl Lawrence, manager of operations, says that operations are undertaken only to get the line into operation. Domestic and occasional international charters are being booked.

The company recently transported the Soviet embassy staff from New York to Santiago, Chile, but used two DC-4's instead of a DC-4. The smaller transports were selected for the job because of the size of fields at receiving points and availability in the central and South American areas of DC-3 parts.

**Summer Plans.**—A number of

charters are scheduled for the next few months, most of them domestic, although several may be run into Alaska and across consideration is being given to operating non-scheduled between New York and London.

These flights with the DC-4's might be on charters by large companies or tourist and travel agencies, or some might carry passengers on separate tickets handled by such an agency in Denver, Inc.

## Milwaukee Store Uses Air Delivery Service

Three regularly scheduled delivery flights are made weekly from Glen Meade field, Milwaukee, by a light plane delivery service operated for Milwaukee's Boston Store. Twenty cities now are receiving the service, operated without extra charge for the store's out-of-town customers.

As of Jan. 15, the last figures available, the two Piper Cubs, which are used in the service, had flown more than 13,800 miles carrying more than 8,100 lbs. of merchandise, or 5,000 packages.

**Postoffice Air Run.**—The planes and pilots are provided by Midwest Airways, at Milwaukee. There are no limitations on the size of packages as long as they will fit into the 15 cu. ft. cargo space and do not weigh over 100 lbs.

The air delivery service carries the bundles to the local post office, where local delivery services pick them up and make final delivery to the customer. The planes carry merchandise on the return trip to

## Air Ambulance

An ambulance service by air has been inaugurated by John L. Bullock, co-owner of John-Bullock Funeral Homes at Houston. The service utilizes a twin engine Cessna to carry patients from Houston to specialists in any part of the U. S.

The plane is fitted out to carry pilot, co-pilot, two passengers and one patient. It is equipped for day and night flying, with all instruments.

be delivered in Milwaukee.

**Service Is Regular.**—Regularity of flights over the first six months of operation was comparable to airline schedules. Flights were scheduled three times during the period, twice because of weather. The planes operate with skin during the winter months.

Interest in the service has been growing steadily throughout the state and Midwest Airways is studying plans for making at least one of the Cubs with a new Piper Super Cruiser for additional speed and load carrying capacity.

## Kansas Interstate Line Plans Service by June 1

Kansas' first interstate airline, linking 12 cities, in connecting military zone-organized Bechtel's is preparing, has regular service about June 1.

Although final arrangements have not been completed, Kansas Airways, Inc., at this time proposes two circular routes with Hichman as the hub, with the two main lines to Kansas City, Wichita, Topeka, Abilene, Lawrence, Kansas City (Kona), Glens, Emporia, and Wichita, is complete.

**Routes Detailed.**—One route will start at Wichita, with stops at Hutchinson, Topeka, Manhattan, Topeka, Abilene, Lawrence, Kansas City (Kona), Glens, Emporia,



**Non-Scheduled Transport.** This converted C-45, operated by Trans Air, Inc., was the first put in non-scheduled operation.



#### SEAFOOD FLIGHTS STARTED BY ACT

A shipment of 8,000 lbs. of lobsters from Augusta, Me., to New York for Jordan Lobster Co. opened a seafood air service by Air Cargo Transport Corp. which will extend shortly to Detroit, Chicago and the West Coast. The lobsters are packed in a watertight cardboard container with a lot of ice to keep them fresh. Shown, left to right, are: Gen. Mildred of Miami, El Ray Fennell, ACT president, and Richard Reed, State Sea and Shore Fisheries Commissioner, before the first flight started. The ACT Skyvan reached New York 2 hrs. 5 min. after taking off from Augusta.

Charles F. Scott, Pittsburg, Permian, Coffeyville, El Dorado, and Wichita.

The other route will link Hutchinson and Wichita with northeast, southwest, and southern Kansas, including Great Bend, Haseil, Hays, Plainsville, Norton, Goodland, Garden City, Dodge City, Pratt, Anthony, Arkansas City, and Wichita. Airports at several of these stops must be improved, however, before the Roadster can land.

#### NEW DEVELOPMENTS

##### Arizona Line Adds Second Round-trip

Arizona Airways, Inc., Phoenix, has added a second round-trip daily on each of its extensive network opened last month (Aviation News, April 1), and has applied to CAB for interstate mail, cargo and passenger, H. O. Nelson announced.

Two round-trips will be made on four days a week between Phoenix and Prescott, with a stop at Grand Canyon added on the first Prescott flight each day. Two daily flights on three days a week will connect Phoenix and Yuma. Company says approval to serve Los Vegas, Nev.,

El Paso, San Diego, Albuquerque, Salt Lake City, and in Mexico two cities, Guaymas and Sonora.

Vietnam Air Express Co., 13 Commerce St., Newark, N. J., flew 50,000 hatchling eggs to Pomona, California, under USDA contract, using the company's newly converted C-47. Special packing crates were used and cargo temperature was kept at 40-70 degrees Fahrenheit.

Hendrick Air Transport, John Rodgers Airport, Honolulu, has been organized by executive men headed by Lloyd Oshman, president, for charter service. One Beechcraft has been delivered, a second is expected in June.

Viking Air Transport, Metropolitan Municipal Airport, Los Angeles, has begun cargo service to the East. Harry E. Lyng is president, Robert Reed is vice-president.

West Texas Airlines, Dallas, headed by R. C. Jones, president, has announced that daily service will be started soon. May linking Fort Worth, Amarillo and Dallas.

Empire Air Freight, Inc., Utica, N. Y., has been incorporated by the owners of Empire Air Lines, already flying scheduled passengers into New York City (Aviation News, March 31).

Frontier East, Atlantic City, N. J., has begun charter passenger service to metropolitan police.

Trans-American Airways, Inc., has been chartered in New York by Jack

J. Gardner, 80 Fifth Ave., New York City, attorney.

National Air Cargo Service, Inc., has been chartered as freight carriers by Rufford H. Rosenbaum, executive vice-president of the new Institute of Air Transportation, and George W. Henderson, 82 Central Ave., Rye, N. Y., 10585, owner.

Copper State Airways, Inc., Tucson, Ariz., has discontinued its air pickup and delivery service to its ranches in mountainous Southern Arizona (Aviation News, April 15), after two weeks' operation, because of dangerous air currents.

Shyvan Express Co., Dunsmuir, Calif., has received its first C-47, with additional aircraft to be added, according to Edward H. McGee, president, and Ray B. David, Dunsmuir, attorney, co-owner. One contract calls for carrying 5,000,000 lbs. of strawberries from Memphis to Los Angeles, McGee said. Passenger charters will be offered later.

#### Non-scheduled Ruling By CAB Awaited

Recent completion of oral argument in CAB's investigation of Trans-Meride Airlines has produced the latest with a third vehicle by which it can examine a defective policy among non-scheduled firms scheduled for circuit operation. Already before the Board and involving the same issues are the non-scheduled investigation, submitted for decision last November, and the Page Airways case submitted early in March.

CAB Public Counsel was aided by attorneys for Northeast Airlines and the Air Transport Association in declaring that Trans-Meride's one-day operation between New York and the Cape Cod area last summer was no regular that the service could not come within the non-scheduled exemption provisions of Section 392 of the Federal Aviation Regulations. They admitted, however, that the exemption has never been defined by the Board and in view of it not ambiguous.

Belmont Answered—in answer to Trans-Meride's contention that it never "held out" a regular service by advertising, opposing attorneys declared that the carrier had not attempted to curb publicity on its operations and that the regularity of the flights in itself was sufficient to give rise to much public attention through word of mouth and news items that advertising was unnecessary.

## Colossus Sparks to NEW IDEAS



SPRAYING orchards from his private airplane, for 25 minutes, in varied circles, throwing a switch or shifting a gear to great his prize, light his plane, pump his water, walk his cows, drive his tractor.

New ideas . . . new and better ways of doing things . . . these are the very heart of life in California. They're the things that make our state, our nation, better than any other in the world. It's the things that have helped to create California's modern life in every respect.

Take his beloved in orchards. He sees the orchards as an almost kind of family, working hard to grow good fruit. He's the man who's the heart of a family. With it, he can improve crops, livestock, forests . . . spot forest fires . . . control insects . . . think on and on . . . come help to save the machine parts, or a doctor.

Be sure of this: The more responsive he is to new ideas, the more he develops as Country Gentleman. It's in his work his family's food and goods. This attention is paid . . . and relief upon . . . the American's top-half income, enjoying nearly four-fifths of the national farm income.

It is not only a guide to better farming, but a guide to better living and better spending, as alert advertisers have discovered.

#### Fact of Special Interest to the Aviation Industry

Survey shows 60% of personal plane will be sold in remainder of next year.

In Kansas 625 out of 10,000 farm families intend to buy planes in 1946; only 108 out of 30,000 city families.

Small families—own a small plane—produce and consume 85% of all American produce!

Farmers' incomes have doubled in the last five years!

Country Gentleman's readers are concentrated among the top-half farm families.

**Country Gentleman**  
NATIONAL SPOKESMAN FOR AGRICULTURE  
A CURTIS PUBLICATION

## PRODUCTION

### U. S. Manufacturers Eye British Move to Corner Export Market

Apprehension is relieved somewhat by belief that primary concern should be our own domestic market, plus fact that American distributors are clamoring for planes.

By WILLIAM KROGER

Increasing efforts by Great Britain to gain outright control of the aircraft export market, particularly in South America, is being watched by U. S. manufacturers with a degree of apprehension that is relieved to some extent by their belief that the primary concern should be the U. S. domestic market.

Transport plane manufacturers have specially gone after foreign business, and with marked success in some cases. Makers of private planes—who in the end may account for the greatest export volume—are just as sincere in their efforts, but for the moment are restrictive both their export activities and information about themselves for fear of offending plane-hungry diplomats at home.

**British Move On Broad Scale**—Meanwhile, the British are moving on a broad scale, with discreet publicity as to results, and the method

of achieving the results are not always indicated. DeLavaland claims to have "sold" 180 Douglas Rapides, two-seaters, light transport, to some 18 countries, although the extent of deliveries is not known.

DeLavaland also has negotiated with Sweden what is termed one of the largest export orders in the history of Britain's aircraft industry. It covers Fieseler jet-propelled fighters, Gotha jet trainers and a Gotha manufacturing license for the Swedish Air Force.

**Control In South America**—Probably the most intense British export activity centers in South America. Argentine firms have ordered 30 Vickers Viking transporters, and have already received several war-built flying boats converted for commercial purposes.

The Argentine situation is of interest because of the size of its pri-

mary market for U. S. commercial products, and our present relations with that country. In 1933, U. S. aid to Argentina \$4,357,000 worth of commercial products, including aircraft valued at \$1,445,000. As this country's manufacturers turned to the job of supplying British and French war production, the exports to Argentina progressively declined to \$1,150,000 in 1940. Last year, exports to that country amounted to \$351,600, including sea planes, but no powered aircraft.

**British Strongly Argentinian**—Argentine, second largest South American nation, but the weakness, in normal times has a healthy trade with both Britain and the U. S., with Britain possibly being the most important due to its role as Argentina's largest single customer. Britain is taking full advantage of the present hostilities between U. S. and Argentina.

A British trade mission now in Argentina sales other than those covering the Vikings and the Spigs boats have been arranged, representatives of the Argentine Air Ministry are going to London to study "terminal air traffic" and Argentina has been licensed to produce several British-made fighters. British activity in other South American countries is noticeable. Sales have been delivered in Brazil and Venezuela, although the effect has not been too happy for the manufacturers and development of radio-controlled aircraft.

**The Civilized Firm**, in a communication to the airport authority, and it would require approximately 100,000 sq. ft. of space, exclusive of hangars and wind tunnel.

long-run export trade between the two nations, as the early delivery date, within the next few months, is seen as a motivating factor in the deal. In view of the competitive situation on the North Atlantic, British interest was for its own large, long-range transport.

### Fleet Aircraft Ltd. Reports Decrease in '45 Profits

Fleet Aircraft Ltd., Ft. Erie, Ont., has reported a net profit of \$140,000 for the calendar year 1945 as compared to \$153,500 in the previous year. During the year all government contracts were terminated.

President E. G. Smith stated at the annual meeting that he did not anticipate a profitable 1946 due to heavy expenses of reconstruction and to the higher cost of actual production on the new two-place Canards. The company also is planning development of other types of aircraft.

### Ohio Firm Seeks Space at N. C. Field

The International Aviation Corp. of Cleveland, Ohio, has applied to the city-county airport authority at Wilmington, N. C., for authority for lease of a portion of Raleigh Field and several adjoining surplus Army buildings to be used as the manufacturing and development of radio-controlled aircraft.

The Cleveland firm, in a com-



### FIRST PRODUCTION ROCKET

R. S. Johnson, chief designer of Johnson Aircraft, Inc., and designer of the Rocket 145 personal plane, delivers the first production model to L. D. Thomas, president of the Rocket Aircraft Sales Corp., national distributor. Cash deposits for more than \$1,000,000 worth of the plane already had been received from customers before the plane was certificated.

incorporation to the airport authority, and it would require approximately 100,000 sq. ft. of space, exclusive of hangars and wind tunnel.

**Board In Favorable**—The Wilmington, a spokesman for the airport authority and the latter was favorably inclined to negotiate the lease but will request additional information as to building details.

Currently the airport authority has control over the field proper and some 28 one-time Army buildings,

including hangars. Most of the buildings the Cleveland firm proposes to use belong to the government and have not yet been declassified surplus, although the Army has abandoned them.

### Warehouse Is Established By Lockheed of Canada

Lockheed Aircraft Corp. of Canada, Ltd., has established an office and warehouse in part of the building occupied by Fleet Aircraft Ltd., in Ft. Erie, Ont. Chartered in 1939, the corporation which has been inactive prior to and during the war, will conduct its activities for the present to the sale and spare and component parts acquired from the Canadian War Assets Corp. General L. Hall is in charge of the office.

### Surplus Equipment Dealer Agreements Total 1,574

Number of dealers signing agency agreements for the disposal of surplus machine tools and production equipment had reached 1,574 by March 31, War Assets Administration has announced. In addition, 219 agreements have been negotiated but not finally approved, and 318 applications are pending. The agreements with agents for tools provide for 13.6 percent commission, while those covering aircraft parts and components permit 40 percent commission. Differences in largely accounted for by the fact



**British Export Progress**—Dark areas on the map are where only one British company, DeLavaland Airways, has sold only one type of plane—the Douglas Rapide, light transport designed 12 years ago. Countries where orders have been obtained for this aircraft include: Holland, Lebanon, Iraq, Turkey, Iceland, Portugal, Angola, East Africa, Egypt, Brazil, South Africa, Canada, Australia, India, Algeria, Peru and Chile.

**British Subsidies Indicated**—Since U. S. manufacturers deeply resented as the export market for converted British is not set just to give a pro-war share in South America, but to capture the market completely before the U. S. industry is ready to go after such share.

There are some indications of how this could be done. For example, the Percival Premier, four-place plane, is being sold in South Africa for the equivalent of \$13,000, which some U. S. authorities regard as below cost—although points to an export subsidy. Similarly, the Bristol Freighter is being sold at \$75,000 f.o.b. This is a 16-passenger aircraft, roughly equivalent to the DC-3 in size.

**300 Planes Ordered Here**—While orders from 13 foreign nations for U. S. transport total approximately 300 planes, there is only one South American order—Brazil's—with two Douglas DC-3s—on the list. The fact that British Overseas Airways Corp. has ordered five Lockheed Constellation means little in the

### Convair Plant Space Being Split Up

Disposal of a major portion of the San Diego plant operated by Consolidated Vultee during the war is expected shortly after the war's termination now pending at War Assets Administration on the basis of multiple tenders.

The arrangement is merely the leasing, or sale in some cases, of parts of huge plants to small businesses. In the case of the Convair facility, those deals already have been made. A new building company has leased 42,500 sq. ft. in four buildings at an annual rental of \$4,000, and a heating equipment company has leased 12,000 sq. ft. in one building at \$2,000 a year. Another portion of the plant has been sold outright to the Bobbi Motor Car Corp. of San Diego for \$1,000,000.

**Other Deals Pending**—Approximately half a dozen other deals are pending for space in this plant which comprises 20 buildings cov-

ering 1,225,000 sq. ft. and covering about 90 acres.

One other war-built aviation plant has been disposed of as the multiple-tenancy basis, the modification order of Harrington, Ala., based during the war by Berthel, Moore Persons, Inc. That plant, estimated 1,050,000 sq. ft. now is occupied by six tenants.

**No Other Deals Pending**—At the present time, multiple-tenancy disposal for any other large aircraft plant is not contemplated, although that question could change overnight should there be applications covering a particular plant.

In another action brought about by the surplus plant disposal program, Wright Aeronautical Corp. has agreed to sell its Plant 1 and 2 at the former Ford Aero Machine Co. of New Jersey. Transfer is subject to final disposition by Wright of the West-Ridge plant it recently agreed to buy from W.A.

their agents for aeronautical areas meet warehouse and maintain the surplus pending sale, while most of the tools are shipped direct from WAA warehouses to buyers upon an agent's order.

As of March 10, tool orders had total national costing approximately \$22,557,893 (for \$11,222,000). On March 10, surplus tool inventory was \$180,669,507 on the basis of original cost.

## Fiscal Problems Delay Fairchild Annual Meeting

Annual meeting of Fairchild Engine & Airplane Corp. has been postponed from its regularly scheduled date of April 16.

J. Gordon Ward, Jr., president, said postponement was forced necessary because of unusual accounting problems arising in connection with the conversion of a cost-plus-award-fee to fixed price at a large government contract still in liquid. A recent settlement with the government covering materials taken over after VJ-day from another aircraft manufacturer, and settlement of terminated contracts and subcontracts.

**Statements Delayed**—These problems, Ward indicated, prevent the corporation from preparing financial statements that adequately reflect the results of operations during the last fiscal year in time for the regular meeting date. The meeting is expected to be held within 30 days.

## RAF Test Pilot School Draws Many Allied Flyers

A test pilot training school operated by the RAF at Cranfield, England, is drawing test pilots from all parts of the world for the same month course.

Fifty-seven pilots have taken the course after being selected by the governments of Great Britain, Australia, New Zealand, Canada, South Africa, United States, France, China, Holland and Norway, and another 25 are in training now.

**Advanced Work Grows**—The purpose of the RAF school is to give advanced training to the most able test pilots to equip them to analyze the performance of planes and judge their structure. The course includes study and flying various types of aircraft, visiting British aircraft factories, and visiting the RAF experimental station at Farnborough. At the school eleven places are reserved for the IIAF.

seven for the Fleet Air Arm, four for British civilian test pilots, six for pilots of the Dominion, and seven for those of Allied countries.

## British Aircraft Industry Assigns 'Envoy' to India

Group Capt. Stewart O. Tudor has left London for India to act as trade ambassador there for the British aircraft industry. He will open an office for the Society of British Aircraft Constructors at New Delhi. He is the third representative to go abroad to represent the Society, the others being W. W. Wallis-Lucas in Latin America and Col. E. P. J. Ryan in the Middle East.

The expansion of the British aircraft industry's foreign representation comes at a time when the United States is abandoning its program for civil air attachés in our embassies and legations.

## PT-23's Sell Rapidly

Sale of 308 surplus Fairchild PT-23 primary trainers during the first 15 days they were offered at new prices, has been announced by War Assets Administration. The second sales, ranging from \$390 to \$1,275, became effective March 15. The Cape Girardeau, Mo. sales-storage depot sold 143, 135 were disposed of by the Salem City, Va., depot, and three were sold at Salisbury, Mo. More than 100 PT-23's remain

## New Engines Readied

Jack B. Beane is expected to have their two new six-cylinder horizontally designed aircraft engines ready for the NACA tests soon. One will be a four, the other a six-cylinder model. Both are air-cooled and have reduction gears.

They are rated to develop 16 and 15 h.p. at cruising and about 20 and 20 h.p. at takeoff, respectively. Each has a 3.5-in bore and a 3.31-in stroke, or a piston displacement of 11 cu in per cylinder.

**Construction Details**—The one has a 135-in in total piston displacement, weighs 200 lbs., or about two pounds per horsepower and develops about 15 horsepower per cubic inch displacement. The four cylinder one, on each side, and half the crankshaft, are cast from an aluminum alloy, with cooling fins, struts, bolt holes and all passages all formed in the die. Slide valves are used.

In WAA surplus stacks, part of those located at Cape Girardeau and Union City.

## GE Gets 'Lab' Plans

General Electric Co., Schenectady, N. Y., has been issued a D-22 and two D-24 licenses for construction and flying laboratories for the testing of radio and aircraft electrical equipment.

# A Report on EDO Light Plane FLOAT PRODUCTION



• Already in 1945 we have manufactured more Model 150B floats for light planes than we ever made in any previous year. Yet the backlog of orders is still large and we cannot now make immediate delivery on new orders.

We anticipated that tremendous interest in float flying and planned 1945 light plane float production at five times the largest pre-war year. Moreover, we planned to manufacture floats over the winter for spring availability from stock.

All this planning could not produce floats without materials—and many were unavailable. Consequently, float production did not begin until January and is just now reaching the planned rate. We are over the hump and future deliveries will be accelerated if materials continue to flow steadily.

The great demand for aluminum alloy floats is due to their good performance and long life. All-metal construction offers great strength with almost lightness and resists water absorption with ex-

cellent weight gain. Over 20 years' experience in float design and manufacturing secures the highest degree of hydrodynamic and aerodynamic efficiency, along with tried and proven production methods.

We know that, even though waiting is difficult, you will find greater satisfaction in operating on Edo all-metal floats. We are doing our best to see that your needs are filled and we anticipate that our increased production rate will eventually meet the demand.



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## GE AIRCRAFT RADIOS:

Final check is given the new General Electric two-way radio sets for use in personal aircraft. The "flying microphone" provides two-way communication with airports and radio range stations, and permits reception of commercial broadcasting stations.

## PERSONNEL

### Benjamin Watson Named As Assistant to Hardin

Benjamin M. Watson (photo) has been appointed assistant to Thomas



O. Hardin, executive vice president of TACA Airways, with headquarters in Miami. He is the great grandson of Jose Figueras, first President of Costa Rica.

Watson has spent about 25 years in Mexico and Central America. During the war he was deputy director of transportation for the Army with headquarters in San Francisco.

Bernard Schaller has been appointed assistant chief engineer at Dorr Hydromatic Inc., to direct design and development of aircraft engine and maintenance equipment. Schaller was formerly with American Airlines, Inc., as project engineer in charge of maintenance and overhaul equipment.

David R. Ackor has been appointed director of manufacturing and Robert A. Lawson assistant general manager of Hudson Manufacturing Co., Inc., in Buffalo, N.Y. Ackor, who has been an assistant to the president, succeeds Harold E. Schneider, who resigned. He previously was with General Motors and White Motor Co. Lawson was works manager for Consolidated Vultee Aircraft Corp. at Denvers and later at San Diego before joining Hudson.



### ENGINEERS HONORED:

Arthur E. Raymond, left, was promoted in charge of engineering at Douglas Aircraft Co., and Harold E. Schneider, chief engineer of the Allison Division of General Motors Corp., who have been nominated by President Truman to the National Advisory Committee for Aeronautics (Aeronautics News, April 22).

The second annual awards of the American Museum of Natural History's Arthur Williams Memorial Fellowship have been made to Walter F. Johnson, chief industrial safety engineer of American Airlines, Inc., and Gilbert F. Tyler, industrial safety superintendent of Pan American Airways. Under the auspices of New York University they will conduct research on safety in aviation ground operations.

Andrew L. Roseberry (photo) has been promoted to engineering operations manager of Roney Aircraft Engines Division of the Fairchild Reginald & Airplane Corp. He has been serving as chief project engineer. Before joining Roney he was an automotive engineer in the research and development division of the Atlantic Refining Co.



Cut. Stanley M. Proudy (photo) has been named TWA representative and chief of administration in the office of Kansas Airways, of which TWA is arranging to purchase 10 percent of the capital stock and to act as engineering and operating. The company recently retired from active service.



F. M. McGreger, formerly control region superintendent for Trans-Canada Airlines, has been promoted to operations manager of TACA's trans-Atlantic service. F. M. McGreger, formerly superintendent of the Atlantic region, succeeds McGreger as operations manager of the central region. E. F. K. Robinson has been appointed airline region operations manager and E. M. Stahl, operations superintendent at Leithridge, has been promoted to operations manager of western region.

Charles A. Foster has joined Pacific Air Lines as director of engineering and maintenance after resigning as technical engineer with Wright Aeronautical Corp. in Los Angeles. He was formerly western aviation sales manager for the Trans



### NEW TWA VICE-PRESIDENT:

Mr. Gen. Arthur R. Wilson who will join Transcontinental & Western Air, Inc., as a vice-president on his release from the Army. Gen. Wilson will be in charge of TWA's European routes. He served overseas during the war and has been War Department representative on several committees, including the Senate War Investigating Committee.

Co., and was an executive with Pratt & Whitney.

Robert H. Wharton, Jr., has been named director of personnel by Delta Air Lines. He was formerly chief personnel manager of Douglas Aircraft Co. At the same time Todd G. Cole was advanced from general auditor to chief accountant. Fred Hunschler, Jr., has been named as chief inspector of the airline. He has been an active associate of maintenance for the Civil Aviation Administration.

Lawrence H. Avila has returned to United Air Lines as chief of cargo sales at San Francisco after serving with the ATC. Avila has been with United for 12 years.

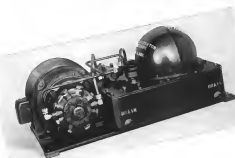
Wing Commander Donald Bruck, recently discharged from the RCAF, has been appointed operations manager and chief pilot of DeHavilland Aircraft of Canada Ltd., Toronto.

G. Mitchell Shandell has been named flight services superintendent for the transatlantic Clippers operated by Pan American Airways Air position by his experience of passenger service for the line at Lisbon.

Conde John Chasol Adams, flight surgeon in charge of the division of Medicine and Surgery, has been named the Deputy of Chief for his services during the war.

# HYCON

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## FINANCIAL

### Annual Airline Reports Show Eastern Led 'Big Four' Last Year

Gross revenues rose 66.48 percent and operating profit 45.48 per cent; TWA on operating income declines 36.73 percent—sharpest drop of group.

The 1945 annual reports of the airlines show divergent trends. Despite operating losses, several substantial gains in gross revenues, varying from 12.48 percent for United to 76.68 percent for PCA.

Trailing these gains is operating profit, however, was a different matter. Four of the reporting lines reveal material declines in net operating income, the largest by TWA with a decrease of 36.73 percent. Net income after taxes was equally disappointing. The detailed results are summarized in Table I.

► **Eastern Does Best**—Eastern Air Lines tumbled in the best profitable performance for 1945 among the "Big Four." It increased its gross revenues by 44.45 percent and yet showed a gain of 52.48 percent in its net operating profit.

This clearly demonstrates that Eastern had its operating expenses under control as they did not increase at a faster rate than the gains in revenues. A major factor was lower depreciation charges in 1945 than in 1944.

► **Cost Control is Key**—A key measure in determining the relative efficiency of cost control can be found in operating expenses per revenue mile. These costs for 1945 and 1944 are shown in Table II for the seven

carriers under review. Eastern clearly has the lowest operating costs at 68.1 cents per revenue mile for 1945 and experienced a substantial reduction from 1944.

The company's annual statement, however, reports that operating expenses have risen since August, 1945, due to increased earnings resulting in anticipation of the acquisition of new equipment and the integration of the 40-hour week on Oct. 15, 1945.

► **Costs Were Lower**—Federal income taxes were, with one exception, lower for the reporting airlines. Eastern was the only carrier which had an excess profits tax. If the company had been exempted from such tax in 1945, its net earnings would have amounted to \$3.70 per share instead of the \$3.58 actually reported.

In all cases, increased gross revenues were due to the gain in passenger traffic. Revenue gains would have been even greater were it not for the two separate reductions in fares, aggregating 13.5 percent, during the year. The basic fare for the industry now represents 43 cents per passenger mile and represents a reduction of approximately 22 percent since 1941.

Some industry observers have as-

TABLE II  
Comparative Operating Expenses  
Per Revenue Mile

	1945	1944
American	\$69.65	\$9.40
Eastern	\$68.00	\$9.07
United	\$66.66	\$7.76
Northwest	\$66.00	\$6.60
TWA	\$66.00	\$5.50
United	\$62.00	\$5.00
Western	\$60.00	\$5.00

signed considerable responsibility about these fare reductions. They maintain that the carriers, operating at reduced load factors, will be unable to share profitably results. A week later—All of the "Big Four" operators carried similar load factors but reported loss in revenues from the operation. This was due to action of the Civil Aeronautics Board in ordering lower rates.

A typical example of this action is found in United's results. This carrier, the largest transporter of mail, reflected an increase of 17.3 percent in total revenues by a reduction of 13.5 percent in revenues per revenue mile.

► **Western Shows Great Gain**—Western Air Lines showed one of the most surprising results for the year. Its total revenues increased 68.11 percent, reflecting gains in passenger and mail revenues. The company, as a result of keeping its expenses in line, was able to show an increase of 52.48 percent in net profits after all charges and taxes.

One of the more disappointing reports is that of TWA. Its gain of 32.39 percent in gross revenues was more than offset by the net decline of 34.11 percent in net income.

► **United Lags**—Probably the poorest relative performance belongs to United. This carrier was able to show but a 12.48 percent increase in gross revenues. Reflecting the \$26,206 provision for 1944 plant reserves, the company actually had a decline of 36.65 percent in net income instead of 31.35 per cent as shown in the table.

The substantial increase of 76.68 percent in gross revenues for PCA, loses most of its significance when it is realized that the company was able to show but a 1.45 percent increase in its net operating profit. Lower 1945 taxes brought the gain in net profits to 5.55 percent.

Other mentioned items include the fact that the airlines showed reports of no decrease in 1945 in total operating expenses.

## TRANSPORT

### ALPA Failure to Supply Evidence Confuses Pilot Strike Situation

NMB chairman says it cannot recommend presidential action because of irregularities in case; assets walk-out would be "illegal," was bound unable to remain silent.

By BLAINE STUBBINS

Appointment by the President of an emergency fact-finding board to investigate and to recommend terms on which to settle the threatened strike of 1,000 TWA pilots "during the week of April 21," was postponed when the National Mediation Board found irregularities in the case. The President would act only on recommendation of the Board.

H. H. Schwartz, chairman of the Board, confirmed to Associated Press his statement that the strike would be regarded as illegal as things now stand.

However, if the pilots should strike, regardless of the Board's position, there is no provision in the Railway Labor Act for restraining or punitive action against them. They would be "redemned only by public opinion," in the words of a qualified official.

► **Vote Evidence Withheld**—The Board Chairman said that in response to several requests David L. Ribicoff, ALPA president, had provided to furnish evidence of the strike vote, but later he refused. Schwartz also said Ribicoff had refused to give the date of the proposed strike, or to make a statement of ALPA demands for higher pay on 4-man plans. He had previously said he had ordered his attorneys during a press conference in Washington.

► **Arbitration Refused**—According to Schwartz, ALPA refused a Board proposal of arbitration which TWA agreed on April 2 to accept. Ralph S. Demos, chairman of the airline wage negotiating committee, previously had made a statement to the same effect. Latest word was that the committee, which now hopes of arbitrage to negotiate pilot pay on 33 airlines planning to operate 4 in arbitration after leaving ALPA, expects equipment, is standing on to make the next move.

The mediation board takes the position it cannot recommend appointment of an emergency fact-finding board until it has data of the proposed strike, evidence authenticating the union's poll, and a lot of its demands.

► **ALPA Charges Withheld**—ALPA had the choice of (1) going ahead with the "illegal" strike, (2) furnishing information so that the Board may recommend an emergency fact-finding board, (3) its withdrawal from the mediation board, (4) reopening negotiations with TWA, either on its own or with mediation, or (5) dropping its claims entirely.



AMERICAN ORDERS 20 RAINBOWS

American Airlines System expects to receive delivery in the fall of 1945 of the first 20 Rainbows ordered from Republic Aviation Corp. Where the first four-engine transports will be used has not been decided, but since they are best adapted to long-range operation they may be used transcontinentally as well as overseas. For greater passenger comfort, the service over America will be a 10-passenger ship, although the plane can carry 44 under a seat-making arrangement (Aviation News, Feb. 19). Commercial adaptation of Army's XP-12 reconnaissance plane, the Rainbow has a total range of 3,100 miles at 30,000 ft. It is piloted at an average speed of 410 mph, according to its designer, Alexander Kartveit, Republic's engineering vice-president, who also designed the Thunderbolt. American says a top speed of 450 mph, at least is guaranteed, with a possible flight from New York to Los Angeles in 4 hr. 45 min. or New York to London in 9 hr. 35 min. Future activities between these points are now 11 and about 12 hr., respectively. American's is the second order for Rainbows. First was by Pan American, which ordered six then negotiated for 12 more.

### Delay Rumored

Government officials dealing with the strike pilot movement had been and anticipated information that the Air Line Pilots Association had set back its threatened TWA strike to start five weeks instead of one day in the week of April 21, as previously announced by ALPA President David L. Ribicoff. They said the controversy was the most confused they ever had encountered, and added that official information on the strike still was lacking.

### CAB Makes Progress In Reducing Backlog

Important progress toward reducing its heavy backlog of pending applications was announced recently by Civil Aeronautics Board on the March 31 status of all fiscal economic proceedings.

During March, the Board disposed of more applications than in January and February combined. The number of decisions pending was reduced from 1,080 on Feb. 18 to 841 on March 31. Twenty-three new applications were entered last month, the case was re-opened

TABLE I—COMPARATIVE RESULTS

After Revenues: Net Operating Income and Net Profit  
(Million dollars)

Carrier	Gross Revenues			Net Operating Income Before Income Taxes			Net Profit		
	1945	1944	% Change	1945	1944	% Change	1945	1944	% Change
American	202,148	229,144	20.10	30,671	30,661	0.03	24,899	24,894	0.02
Eastern	176,116	176,116	0.00	21,418	21,418	0.00	18,600	18,600	0.00
United	212,110	194,081	9.28	30,671	30,661	0.03	24,899	24,894	0.02
TWA	100,000	1,217,100	78.00	1,000	1,217,100	78.00	1,000	1,217,100	78.00
Northwest	100,000	100,000	0.00	1,000	1,000	0.00	1,000	1,000	0.00
United	20,000	20,000	0.00	2,000	2,000	0.00	2,000	2,000	0.00
Western	12,000	12,000	0.00	1,200	1,200	0.00	1,200	1,200	0.00

(1) After 1944-45 period for preliminary figures.  
(2) After 1944-45 period for preliminary figures.

and 56 proceedings were closed, for a net drop of 32.

**Blacklog Analyzed**—Breakdown of the 968 blacklogs still pending on March 31 showed 543 route applications for scheduled domestic operations, including 461 services using conventional aircraft, 17 using pickup equipment, and 65 employing helicopters. House applications for scheduled foreign service totaled 92, including 63 with conventional aircraft, four with helicopters and three with lighter-than-air craft.

Non-scheduled applications numbered 100; requests for foreign permits, 25. Alaskan route requests, 57 and miscellaneous proceedings involving mail rate, interlocking relationships, acquisition and corporate cases, 118.



#### ATC RADAR:

Radar equipment like that shown above is a C-54 and between Washington and Peru is being installed in 300 long-range Air Transport Command planes. Two of the 60 planes on the North Atlantic run already have been outfitted. The equipment is the AN/AP-55, manufactured by General Electric. Its first use as scheduled air transport occurred this month when ATC's North Atlantic wing took over operation of the Diplomat Washington-Peru run, formerly operated by TWA under Army contract.

the whole arrangement, admittedly inefficient and a losing proposition.

**Would Be Inconceivable**—He and the British would want an equal use of their own equipment, personnel and methods, which would be inconceivable with U.S. airline practices. TWA, he added, had no objection to formation of another Italian airline with British participation.

While admitting the British previously had been effective in blocking TWA's perceptions in the civil aviation of Greece and Lebanon, Frye said he thought the Italian contract would go through despite London's objections and estimated LAL operations would begin 60 days after the agreement is ratified.

#### OPA Agrees to Allow Airborne Food Markup

OPA has agreed to a request by ATA and others that air transportation costs be recognized in regulations on the marketing of fresh food and seafood.

The agency has permitted wholesalers to add to selling prices the actual air transportation cost at 42 cents per ton-mile

whichever is lower. If a retailer pays the most, he may make the same addition to his net cost for the item.

The figure of 42 cents a ton-mile in the new special provisions, effective April 30, is the same as that used by the fresh fruit and vegetable industry, and will apply pending outcome of further experiments. OPA anticipates that meat airborne fresh fish and seafood will be purchased by hotels and restaurants in wholesale quantities.

**Markup Followed**—For the relatively small amount sold at retail, prices will be higher, the estimate being that consumers probably will pay a 16-cent a lb. more for fresh fish or shrimp, for example, brought inland 1,000 miles than for the same product carried by surface transportation.

#### Four Airlines Lease C-54's For Use in Pilot Training

Seven Douglas C-54's have been allocated on a rental basis by War Assets Administration to four airlines for use in pilot training. The ships were leased for six months at \$2,000 per plane per month, subject to WAA renewal on 30-day notice if there is a sale for the planes after the leases have been in effect 60 days.

Two each went to Pan American, TWA and United, and the other to Chicago & Southern.

**Other Allocations**—In addition, WAA allocated one Curtiss C-46E to Capital-Wright Corp. for conversion of an Army experimental project; a Douglas C-54E to Transcontinental Air Express Corp. and a Consolidated P2V-5A to Walter Mole, Middleburg, Pa. If the C-54E is rejected by Transcontinental Air Express it will go to Aero Industries Corp., New York City.

#### Divestiture Complicated

Aviation Corp. has sold its controlling interest in American Airlines, thus complying with a CAB divestiture order issued last October. The Board has recognized the complexity in getting AVCO to remove its remaining 4 percent interest in AA (\$1,535,000 shares) from trust. The divestiture gives the way for implementation of American's contract with Consolidated Vultee for 168 B-24 twin-engine transports, held up by CAB on grounds that AVCO controlled both companies (AVIATION NEWS, March 25).

## The finest "Testimonial" we ever received!



Excerpt from the Los Angeles Times



Yes! We lost a million dollar order...and we feel good about it! We feel good because we couldn't possibly have received a better commendation of Solar's engineering skill and craftsmanship.

This Lockheed order was for stainless steel exhaust system parts for replacement...but the original Solar-built parts were so good that Lockheed found them to have "twice the life expected." Naturally Lockheed cancelled...and naturally you'll want to know more about Solar's unique ability to produce intricate stainless steel parts...longer lasting parts engineered to amazingly close tolerances in spite of design complexities.

**SOLAR**  
STAINLESS STEEL

#### Solar exhaust system parts last longer

Lockheed found that Solar-built exhaust systems last "twice the life expected!"...double the hours...double the air mileage...resulting in fifteen \$1,000,000! Better check with Solar on the way you can make by using Solar exhaust system parts. Write or call your nearest Solar office.







## The Need for an Air Policy Board

**T**HE ARMY Air Force has announced its own proposal for a national air policy. It suggests a 10-year program for a \$600,000,000 military Air Development Center to test expensive aircraft and missiles, and their components and equipment. The tremendous plan would be executed from the present AAF development base at Wright Field. It would set up an entirely new category—military engineering development research.

Simultaneously, the National Advisory Committee for Aeronautics proposes a new \$200,000,000 National Supersonic Research Center of its own. This base would accelerate fundamental research only, separate from its three existing laboratories.

Then, two great agencies propose separate public expenditures of close to \$1,000,000,000.

**But industry itself, rapidly borrowing into the complex problems of supersonics, will need other millions for applied research, to start and maintain prototype and quantity production.**

Other contributions in the form of reports have been issued in the past year by existing groups. Congress must accept the responsibility for coordinating all such proposals and determining our future national air policy. The Navy believes it can receive useful help by depending upon a National Air Policy Board, a distinguished group of leaders similar to the Advisory Board and that proposed by Senator Mitchell.

A billion-dollar expenditure in peacetime may arouse criticism in some quarters. Yet in the five fiscal years ending in 1944 total outlay for research and development was approximately \$645,000,000 for the NACA, Army Air Forces, and Navy Bureau of Aeronautics. The opinion is unanimous among our aeronautical and military leaders that our sights were too low. Even in the pre-supersonic era, we barely won the air war. It is nearly a year since the fall at Germany. Yet we have only 13 supersonic wind tunnels—fewer than the Nazis were running. Several German tunnels under construction would have provided tests for 7,500 mph.

In its announcement of the report by the Air National Commission, directed by Maj. Gen. Curtis LeMay, Deputy Chief of the Air Staff, the AAF avowed, "Fundamental research in aeronautics must never again be interrupted. There must be adequate development facilities, independent of our research facilities."

The Army Air Forces says it will ask Congress for \$500,000,000 shortly, with ultimate cost of its project set close to \$1,000,000,000. A base of 100 sq. mi. is proposed for "continuous developments . . . to our power in its broadest sense," covering these fields:

• Supersonic craft, piloted and pilotless; winged missiles.

• Atomic power propulsion of aircraft and missiles; other atomic devices.

• Flight and navigation equipment above the atmosphere, including "space lasers" anchored far above the earth.

• Destructive or death rays, and rays for control purposes, using light, heat, or magnetic energy.

• Aircraft and missile technique development. Right facilities are proposed.

**Fluid Dynamics**—Five wind tunnels providing up to 3,500 mph, thrust measurements perhaps up to 1,000,000 lbs., component laboratories.

**Thermodynamics**—Heat transfer and analysis, velocity pressure distribution and boundary layers, combustion chamber data, nuclear fusion, rocket or jet reaction stands.

**Structure and Material**—Testing and processing structure and parts of aircraft and missiles under extreme temperatures and pressures.

**Electronics and Wave Phenomena**—Radio control, telemeasuring, navigation, radar, laser, television, bombing devices.

**Physiology**—Effect of acceleration, atmospheric conditions, vibrations, noise and stress on human bodies, under simulated flight conditions.

**Fuels and Propellants**—Equipment for present and future problems, including those in developing rocket and nuclear energy propellants.

**Instruments**—Five test areas for analysis of optics, mechanics, electronics, and development of instruments using high energy radiation.

**Flight Engineering**—Complete airport equipment for full-scale testing of man-equipment units, plus bases for hovering studies.

The base would be conducted by a board representing the services and others.

The NACA's own program for a National Supersonic Research Center covers at least five years. NACA already has six wind tunnels. Five more are in construction, two of which will permit simulating Mach number 4.5. Proposed in the nearest program are four units, including one at 25 to 30 ft. with Mach number 4.5 to 16. Aerodynamic research will be continued on configurations, stability and control, before an uncoordinated supersonic research.

Necessarily for a long-term supersonic program it will be carried up by NACA, which is convinced that:

(1) Supersonic subsonic and pilotless research will dominate the security problem of the future.

(2) Successful development of supersonic aircraft requires the solution of many difficult scientific problems brought about by the unusual conditions of speed, atmosphere, control, and propulsion under which this type of aircraft operates.

(3) The necessary superiority of these aircraft will come only from thorough, fundamental research in advance of the development.

We must have research facilities undiminished of before the war. We are hardly in the final stages of a technological revolution. We must not be caught sleeping again, as the Germans found us, when their jet aircraft and missiles began to take the air.

But how much public money should be spent? Which agencies will participate in the program? Here shall they be coordinated for maximum productivity?

How much should industry receive for vital applied research?

These problems emphasize the urgent necessity for a National Air Policy Board to advise the Congress. ROBERT H. WOOD



## The Birdmen's Perch

By Major Al Williams, AUSA, "TATTERED WING TYPE,"  
Gulf Aviation Products Manager, Gulf Bldg., Pittsburgh 30, Pa.

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Units of the compass-controlled directional gyroscope system. Instruments in foreground are a remotely operated compass and a new-type small directional gyroscope. Mr. Lynch is pointing to a larger gyro-instrument now obsolete.

## MORE FREEDOM IN FLIGHT

THESE three G-E aircraft-instrument engineers, Messrs. Savage, Lynch, and Princi, were prominent in the development of the new compass-controlled directional gyroscope shown in the foreground. This is the first directional gyro that functions as if it had universal freedom of motion. It is not disturbed by sharp dives, spins, rolls, or other acrobatics. Teamed with the compass it becomes part of an electric instrument system that gives an airplane sustained and accurate directional heading in autopiloted flights. The system is so designed that errors usually occurring when compass and gyro are separate are automatically corrected. However, both can work separately if necessary.

In a plane, the compass is located near the wing tips and is electrically connected with the gyro which is considerably smaller than earlier models, and weighs less than the one now in general use. Unaffected by the earth's rotation, it points a steady hand to the set course, and frees the pilot from another routine task. Other electric instruments are being constantly designed by General Electric—including those for jet-propelled planes. Our engineers tackled many "can't-be-done" tasks during the war years. They'll be glad to help you with yours in the years to come. *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*



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